crist Ei 22. An isolated and purified polypeptide comprising a DNA binding domain of an Ah receptor protein wherein said DNA binding domain comprises the amino acid sequence:

RKRRKPVQKTVKPIPAEGIKSNPSKRHRDRLNTELDRLASLLPFPQDVINKLDKLSVLRL SVTYLRAKSFFD and alterations, substitutions, additions and deletions thereof.

- 23. A chimeric Ah receptor protein wherein the native DNA binding domain of said chimeric protein has been replaced with a non-native DNA binding domain, wherein said DNA binding domain is a fusion protein capable of binding a DNA sequence.
- 24. The chimeric Ah receptor protein of claim 23 wherein the non-native binding domain is replaced with a DNA binding domain from a LexA protein.
- 25. The chimeric Ah receptor protein of claim 23 wherein the non-native DNA binding domain is replaced with a DNA binding domain from a Gal4 protein.
- 26. An isolated and purified polypeptide comprising a ligand binding domain of an Ah receptor protein, wherein said ligand binding domain comprises the amino acid sequence: EFQRQLHWALNPSQCTESGQGIEEATGLPQTVVCYNPDQIPPENSPL MERCFICRLRCLLDNSSGFLAMNFQGKLKYLHGQKKKGKDGSILPPQLALFAIATPLQP.PSILEIRTKNFIFRTKHKLDFTPIGCDAKGRIVLGYTEAELCTRGSGYOFIHAADMLYCAE SHIRMIKTGESGMIVFRLLTKNNRWTWVQSNARLLYKNGRP and alterations, substitutions, additions and deletions thereof.
- 27. An isolated and purified polypeptide comprising a ligand binding domain of an Ah receptor protein, wherein said igand binding domain comprises the amino acid sequence:

FMERCFRCRLRCLLDNSSGFLAMNFQGRLKYLHGQNKKGKDGALLPPQLALFAIATPL QPPSILEIRTKNFIFRTKHKLDFTPIGCDAKGQLILGYTEVELCTRGSGYOFIHAADILHC AESHIRMIKTGESGMTVFRLLAKHSRWRWVQSNARLIYRNGRP and alterations,

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